THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 25

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte KENNETH E. STARLING JR., and BRIAN J. LOVE

Appeal No. 95-2165 Application No. $08/019,616^{1}$

ON BRIEF

Before PAK, WARREN, and LIEBERMAN, <u>Administrative Patent</u> Judges.

LIEBERMAN, Administrative Patent Judge.

DECISION ON APPEAL

¹ Application for patent filed February 19, 1993.

This is an appeal under 35 U.S.C. § 134 from the final rejection of claims 1 through 10, all of the claims in the application.²

THE INVENTION

Appellants invention is directed to a dental adhesive system comprising an adhesive component and a plasticizer having the characteristics of low vapor pressure at a temperature of an oral cavity, low solubility with water and saliva, and low toxicity in amounts used in the adhesive.

THE CLAIMS

Claim 1 is illustrative of appellant's invention and is reproduced below.

- 1. A dental adhesive system which permits easier removal of ceramic brackets from an enameled tooth surface comprising:
- (a) an orthodontic adhesive curable without the application of any supplemental heat, which bonds a ceramic bracket to the enameled tooth surface; and
- (b) a plasticizer added to the orthodontic adhesive which promotes a ductile failure mechanism within the adhesive rather than a brittle mechanism when debonding the ceramic bracket, the plasticizer having a low vapor pressure at a temperature of

 $^{^2}$ Two amendments after final under 37 C.F.R. § 1.116 were presented by appellants, on March 30, 1994 and May 20, 1994. Neither amendment was entered by the examiner. See the advisory actions dated April 20, 1994 and June 10, 1994 respectively.

an oral cavity thereby not significantly volatilizing at this temperature, the plasticizer having little solubility with water and saliva to prevent extraction and preserve the plasticizing effect, the plasticizer not being acutely toxic in the doses to be used in conjunction with the adhesive.

THE REFERENCES OF RECORD

As evidence of unpatentability, the examiner relies upon the following references of record.

Kilian et al. (Kilian) 1977	4,010,545	Mar. 8,
Lee, Jr. et al. (Lee)	4,340,529	Jul. 20,
Orlowski et al. (Orlowski)	4,479,782	Oct. 30,
Cohen 1992	5,154,613	Oct. 13,

THE REJECTIONS

Claims 1 and 10 stand rejected under 35 U.S.C. § 112, paragraph one, "as the specification as originally filed, does not provide support for the invention as now claimed." 3

Claims 1 and 3 through 9 stand rejected under 35 U.S.C. § 102(b) as anticipated by Kilian or Orlowski.

Claims 1 and 5 through 9 stand rejected under 35 U.S.C. § 102(b) as anticipated by Lee.

³Answer, page 3.

Claims 1, 2, and 5 through 10 stand rejected under 35 U.S.C. § 102(e) as anticipated by Cohen.

OPINION

As an initial matter, appellants submit that claim 10 does not stand or fall together with the first group of claims, 1 through 9⁴. Accordingly, we select claim 1, the sole independent claim from the first group of claims and claim 10 as representative of appellant's invention and limit our consideration to these claims. 37 C.F.R. 1.192(c)(5) (1993).

We have carefully considered the respective arguments of examiner and appellant for patentability. We sustain the rejection over the Cohen reference as to claims 1, 2 and 5 through 9. We reverse the rejections under 35 U.S.C. 112, paragraph one, and the rejections over Kilian or Orlowski, and Lee and the rejection of claim 10 over Cohen.

The 112 paragraph one Rejection

In a rejection under 35 U.S.C. § 112, paragraph one, written description requirement, it is sufficient if the originally filed disclosure would have conveyed to one of ordinary skill in the art that appellants had possession of the

⁴Brief, page 7.

invention that is claimed. <u>In re Anderson</u>, 471 F.2d 1237, 1244, 176 USPQ 331, 336 (CCPA 1973). In the case before us, appellants and examiner agree that the negative limitation recited in claims 1 and 10, "curable without the application of any supplemental heat," does not appear in the specification as filed. See Brief, page 8, and Answer, page 3. Accordingly, the issue before us is whether the originally filed disclosure would have conveyed to one having ordinary skill in the art that appellants had possession of the concept of curing their dental adhesive without the application of supplemental heat. We conclude that it did. Although the disclosure is silent as to the use of heat, it can reasonably be said that appellants' silence would have disclosed to one of ordinary skill in the art that the dental adhesive would have been "curable" in the absence of heat. Based upon the above considerations, we conclude that the originally filed disclosure would have conveyed to one of ordinary skill in the art that appellants had possession of the concept of curability in the absence of See Ex parte Parks 30 USPQ2d 1234, 1236-7 (Bd App. heat. 1993); Ex Parte Grasselli 231 USPQ 393, 394 (Bd. App. 1983). Accordingly, the rejection is reversed.

The Rejections under 35 U.S.C. § 102

In the rejections under 35 U.S.C. § 102(b) over Kilian or Orlowski, and Lee, the examiner uniformly finds that other components present in each of the above mentioned references are "presumed to be plasticizers." See Answer, page 4. Appellants in each of the above rejections have disputed the examiners findings. See Brief, pages 13 - 18 and Reply Brief, pages 1 - 2. Notwithstanding appellant's challenge, the examiner has maintained his presumption that the other components are plasticizers. It is well settled that where appellant has challenged a fact officially noticed, the examiner must provide objective evidence in the pertinent art in support of his position. The examiner' failure to provide such evidence to support the challenged officially noted fact constitutes clear and reversible error. See In re Ahlert 424 F.2d 1088, 1091, 165 USPQ 418, 420-421 (CCPA 1970); Ex parte <u>Natale</u> 11 USPQ2d 1222, 1226-1227 (Bd. Pat. App. & Int. 1989). Accordingly, the rejections over Kilian, Orlowski and Lee are reversed.

The rejection over Cohen differs from the rejections over the other prior art references. Cohen discloses a dental

adhesive containing the two essential components of the claimed subject matter, adhesive and plasticizer. See column 3, lines 62 - 66 and column 4, lines 7 - 27. We find that patentee's dental cement is curable without heat as evidenced by Examples 1 through 7. Moreover, as the dental adhesive of Cohen is used in the oral cavity, we find that the characteristics of the plasticizers used by patentee and required by the claimed subject matter, of "low vapor pressure at a temperature of an oral cavity," "little solubility with water and saliva" and "not being acutely toxic," are inherently present in the plasticizers of Cohen. These recited characteristics are ones which are necessarily present in dental adhesives to be useful in the oral cavity.

Furthermore, we cannot agree with appellants argument that the dental adhesive composition of Cohen, "is significantly different from that of the applicants..." In determining the distinctions between the adhesives, if any, our focus is directed to the claimed subject matter. Our construction of claim 1, is theat the claimed subject matter is directed to a dental adhesive comprising adhesive and plasticizer, wherein the plasticizer has certain required

characteristics and the adhesive is curable without the applicant of supplemental heat. Based on the above construction of the claimed subject matter, we find that Cohen discloses the requisite components and characteristics of claim 1. Based upon the above considerations the rejection of claim 1 is sustained.

However, as to claim 10 which requires, "a solubility parameter from about 17.5 MPA* to about 22.5 MPA*, the examiner's mere presumption that the plasticizers of Cohen have solubility parameters within the claimed range constitutes insufficient evidence to establish a prima facie case of anticipation. To establish a prima facie case of anticipation based on inherency, it must be shown that the solubility parameter values are inherently possessed by Cohen's plasticizers. On the record before us, there is no evidence to support the examiner's position. See In re King 801 F.2d 1324, 1327, 231 USPQ 136, 138-139 (Fed. Cir. 1986); In re Best 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). Accordingly, the rejection of claim 10 is not sustained.

DECISION

The rejection of claims 1 and 10 under 35 U.S.C. § 112, paragraph one, "as the specification as originally filed, does not provide support for the invention as now claimed," is reversed.

The rejection of claims 1 and 3 through 9 under 35 U.S.C.

§ 102(b) as anticipated by Kilian or Orlowski is reversed.

The rejection of claims 1 and 5 through 9 under 35 U.S.C. § 102(b) as anticipated by Lee is reversed.

The rejection of claims 1, 2, and 5 through 9 under 35 U.S.C. § 102(e) as anticipated by Cohen is affirmed. The rejection of claim 10 under 35 U.S.C. § 102(e) as anticipated by Cohen is reversed.

The decision of the examiner is affirmed-in-part.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. \$ 1.136(a).

AFFIRMED-IN-PART

CHUNG K. PAK)
Administrative Patent Judge)
)
)
)
) BOARD OF PATENT
CHARLES F. WARREN) APPEALS
Administrative Patent Judge) AND
) INTERFERENCES
)
)
)
PAUL LIEBERMAN)
Administrative Patent Judge)

PL/jlb

LOUIS F. WAGNER
OLDHAM, OLDHAM & WILSON CO.
1225 W. MARKET ST.
AKRON, OH 44313